

<p style="text-align: right;">Page 97</p> <p>1 A The amount of tautness or tightness is dependent on 2 the amount of movement and the timing of hooking the 3 chain up in the movement of the vessel to time it in 4 the period of time when things are relatively stable 5 before it starts rolling in the other direction and 6 anticipating that the tautness is going to take 7 place.</p> <p>8 Q You agree that the boat, it's your testimony that 9 the boat, commercial fishing vessel is always 10 rolling, correct?</p> <p>11 A To some degree or another there is always roll, 12 pitch or movement up and down and side to side, 13 that's correct.</p> <p>14 Q Do you know whether the FISHING VESSEL MY WAY was 15 heading up into the seas?</p> <p>16 A I don't recall.</p> <p>17 Q Do you know whether at the time of the accident the 18 vessel was rolling to port or starboard?</p> <p>19 A At the time that the incident occurred?</p> <p>20 Q Yes.</p> <p>21 A At the exact time the incident occurred it's my 22 opinion and belief that it was rolling to port.</p> <p>23 Q Are you aware of any testimony whatsoever that 24 indicates that the vessel was rolling to port?</p>	<p style="text-align: right;">Page 99</p> <p>1 various distances and degrees depends on the 2 movement of the boat in a seaway.</p> <p>3 Q I have drawn sort of a view from the bow looking 4 through the boat to the stern with a keel, size of 5 the boat, and you have got a structure hanging 6 overboard, okay, with a pivot, with a hanging point, 7 correct?</p> <p>8 A That's a hanging point. Right.</p> <p>9 Q If a fixed load, if I stick a lead weight and I 10 chain it to the hanging point, what you are saying 11 when the boat rolls, say if this is the bow here and 12 that is the stern, if the boat rolls to port, this 13 weight would tend to swing outboard?</p> <p>14 A Yes.</p> <p>15 Q If it rolls to starboard, it will swing inboard?</p> <p>16 A Correct.</p> <p>17 Q The higher the hanging point, the greater it's going 18 to move?</p> <p>19 A The greater the length of the pendulum will describe 20 the horizontal movement of that weight.</p> <p>21 Q But that is true when you have a hanging weight, 22 correct?</p> <p>23 A That is what we just said, yes.</p> <p>24 Q If I were to weld on a bracket, come out from the</p>
<p style="text-align: right;">Page 98</p> <p>1 A Well, yes, we just went over that.</p> <p>2 Q Is there any other thing besides that?</p> <p>3 A My experience at sea and ships at sea.</p> <p>4 Q Specifically what experience?</p> <p>5 A Gone to sea as a cadet on all kinds of coast guard 6 vessels, and I served six years at sea on three 7 coast guard ships in various waters including the 8 North Atlantic, the Gulf of Mexico, the Caribbean.</p> <p>9 Q With respect to this dynamic we're talking about, 10 first of all we are talking about relative motion, 11 not absolute motion, correct?</p> <p>12 A Talking about the motion of ships and the movement 13 of weights suspended from lifting points on ships.</p> <p>14 Q And your testimony is that if you have a lifting 15 point under which a load is suspended --</p> <p>16 A Over the side of the vessel.</p> <p>17 Q But the bottom of the, but that only applies if the 18 load is hanging, correct?</p> <p>19 A Well, as we said, if the load is fixed to the hull 20 like a piece of machinery bolted to the deck, then 21 the piece of machinery is moving in the same angle 22 as the hull. But if you have a fixed object 23 suspended from a lifting point, that suspended 24 weight from that lifting point moves dynamically and</p>	<p style="text-align: right;">Page 100</p> <p>1 side plating of the boat, put another bracket, get a 2 come-along and tighten this thing down, we wouldn't 3 get any of that, would we, any movement?</p> <p>4 A Well, you are stopping the movement. You are 5 creating an opposing force that prevents the 6 horizontal movement out of a suspended weight so it 7 becomes fixed to the fixed object.</p> <p>8 Q You would agree with me that the door is not just a 9 hanging weight, it will freely swing?</p> <p>10 A Let's back up a little bit. The horizontal line 11 that you drew is that a solid rod --</p> <p>12 Q I meant a solid rod when I did it.</p> <p>13 A That's a solid rod, right.</p> <p>14 Q Getting back to the situation involving Aguiar, the 15 door is not just a hanging load off of the gallus 16 frame, correct?</p> <p>17 A Well, by your own diagram if you look at this and 18 take away this solid rod and you look at this load 19 that is hanging and this is in a vertical position, 20 everything is stable, center of gravity is down 21 through the center of the boat, this is hanging 22 vertically to, with the center with gravity, if this 23 boat rolls down this way, this object then swings 24 out this way but the side of the boat is not just</p>

25 (Pages 97 to 100)

<p style="text-align: right;">Page 101</p> <p>1 pivoting around the center, it's also sliding down 2 and rolling down so this object here will be closer 3 to the surface of the water. That's the motion 4 we're talking about.</p> <p>5 Q Okay. But --</p> <p>6 A If it's close to the water before the, when the 7 vessel starts to roll or affects a roll, it could 8 actually dip into the water.</p> <p>9 Q Correct. And if you were in the water --</p> <p>10 A If you were sitting in a boat underneath it --</p> <p>11 Q It would look like it dropped?</p> <p>12 A -- you would see it coming down on you.</p> <p>13 Q If you were standing next to it, you are rolling 14 toward the water, it's rolling toward the water --</p> <p>15 A If you are standing on the deck of the boat?</p> <p>16 Q If you are standing on the deck of the boat like Mr. 17 Aguiar was --</p> <p>18 A This distance, let's say this distance was only two 19 feet and at the time the boat started to roll or it 20 was in the process of rolling, this distance here 21 becomes longer.</p> <p>22 Q True. If it's free swinging.</p> <p>23 A Yes.</p> <p>24 Q Is it your opinion that the door was free swinging?</p>	<p style="text-align: right;">Page 103</p> <p>1 A I don't recall.</p> <p>2 Q You would agree if you head into the sea, the 3 movement of the vessel is going to be predominantly 4 pitch?</p> <p>5 A If you are heading into a sea, you are going to have 6 pitch and you and rolling.</p> <p>7 Q You also have pitch, yaw and roll?</p> <p>8 A Correct. If you are heading into the sea, you are 9 going to have more pitch than if you are heading 10 beam to the sea. If you are heading stern to the 11 sea, you will have pitch and yaw and roll, too.</p> <p>12 It's all different.</p> <p>13 Q You are always going to have some movement?</p> <p>14 A Always going to have dynamic movement.</p> <p>15 Q But some of that movement may be imperceptible, 16 correct?</p> <p>17 A Well, some of that movement is imperceptible. Some 18 of it you become used to because you develop your 19 sea legs; and if you don't develop sea legs and you 20 gain your equilibrium, you get sea sick.</p> <p>21 Q What is your opinion as to what occurred in this 22 Aguiar case?</p> <p>23 A Again I'll repeat my opinion. As he was placing the 24 safety hook around the chain on the door to stop it</p>
<p style="text-align: right;">Page 102</p> <p>1 A Well, yes.</p> <p>2 Q What about the bag?</p> <p>3 A The bag is on the stern of the boat connected to the 4 door at the stern and the door is suspended from the 5 pendulum so there is still movement of the door 6 because there is nothing fixed. It's all on chains 7 and wire ropes. There is nothing that is a solid 8 rod that you built into this model. Everything is 9 free to move and it's only restricted when it moves 10 to the travel of the wire that it's attached to. So 11 if he had hooked, if he had been successful in 12 hooking the chain to that door, it would have 13 prevented the door from swinging outboard by the 14 length of the chain.</p> <p>15 Q Is it your opinion that in a calm seas, that the 16 safety chain on the FISHING VESSEL MY WAY is going 17 to be constantly periodically tightened?</p> <p>18 A Depending on the amount of movement of the vessel.</p> <p>19 Q Do you know what the sea state was at the time of 20 the accident?</p> <p>21 A No, I don't know the exact sea state. They 22 described it as good weather, calm.</p> <p>23 Q Calm. Okay. Do you know if they are heading into 24 the sea or side to the sea?</p>	<p style="text-align: right;">Page 104</p> <p>1 from moving away from the vessel to secure it 2 better, the distance between the side of the boat 3 where he was standing and the chain on the door 4 which he was trying to attach the safety chain 5 became greater. And his hand was around the pelican 6 hook, he didn't have the securing ring over the 7 pelican hook and when it became taught, the bottom 8 part of the hook snapped open and hit his finger.</p> <p>9 Q So the cause of the tightening of the safety chain 10 in your opinion had to do with the rolling of the 11 boat?</p> <p>12 A The rolling of the boat and the fact that he didn't 13 act fast enough to get the or couldn't, not that he 14 didn't intentionally, but he was not able to fast 15 enough put the safety hook, safety ring over the 16 stop ring over the pelican hook to prevent it from 17 opening, and it became taught quickly beyond his 18 estimation of how much time he had to perform that 19 task.</p> <p>20 Q In your affidavit, show me where in your affidavit 21 you explain this theory that the rolling of the boat 22 caused the chain to tighten up.</p> <p>23 A Paragraph 7 pretty much describes what we're talking 24 about here. Paragraph 8 describes that. That is</p>

26 (Pages 101 to 104)

<p style="text-align: right;">Page 105</p> <p>1 basically what we're saying in those two paragraphs.</p> <p>2 Q Is your opinion that given the sea state that they</p> <p>3 were in on the FISHING VESSEL MY WAY, that when</p> <p>4 hooking up the safety chain, that safety chain would</p> <p>5 periodically tighten up such as to pull the pelican</p> <p>6 open?</p> <p>7 A Yes, at a certain point if the timing isn't right,</p> <p>8 that is doing to happen depending how much movement</p> <p>9 there is on the boat.</p> <p>10 Q I'm talking about in the sea state present at the</p> <p>11 time of Mr. Aguiar's accident. Is it your opinion</p> <p>12 that given that sea state, that that safety chain</p> <p>13 will tighten up periodically such that it opens the</p> <p>14 pelican hook up? Is that your opinion?</p> <p>15 A It is my opinion that that's what happened.</p> <p>16 MR. REGAN: Objection to form. Go ahead.</p> <p>17 Q Is it your opinion that that would happen</p> <p>18 regularly --</p> <p>19 MR. REGAN: Objection.</p> <p>20 Q -- every time the FISHING VESSEL MY WAY is in the</p> <p>21 same sea state that was present at the time of</p> <p>22 Mr. Aguiar's accident?</p> <p>23 A It's my opinion that any time you are handling</p> <p>24 weights, chains, anything like that, you have to be</p>	<p style="text-align: right;">Page 107</p> <p>1 load should not move so you won't have that dynamic</p> <p>2 occurrence that occurs in a seaway.</p> <p>3 Q You would agree with me that the amount of movement</p> <p>4 of a hanging load is a function of the amount of</p> <p>5 movement of the vessel, correct?</p> <p>6 A Yes, that's one of the factors affecting a movement</p> <p>7 of a suspended load.</p> <p>8 Q And the amount of movement of the vessel is a</p> <p>9 function of the sea state?</p> <p>10 A In part.</p> <p>11 Q What are the other parts?</p> <p>12 A The wind, the liquid load in the vessel. The amount</p> <p>13 of cargo, a number of factors that would affect the</p> <p>14 amount of movement of a vessel in a seaway, not just</p> <p>15 the seaway but the vessel itself, its loading</p> <p>16 condition.</p> <p>17 Q Given a stacked vessel in terms of configuration and</p> <p>18 loading and so forth, that the sea state is the most</p> <p>19 significant determinant of the movement of the</p> <p>20 vessel.</p> <p>21 A That is a major factor, yes.</p> <p>22 Q And that just generally speaking, and we're talking</p> <p>23 about movement of suspended loads, okay, movement of</p> <p>24 suspended loads, speaking just generally, the</p>
<p style="text-align: right;">Page 106</p> <p>1 extremely careful and be alert to the hazards that</p> <p>2 you are going to encounter, and that is one of them.</p> <p>3 That is a common occurrence that they have to be</p> <p>4 aware of, and I believe he stated that.</p> <p>5 Q Your statement is it is a common occurrence?</p> <p>6 A For chains, for wires and chains in moving objects,</p> <p>7 heavy suspended weights, that can happen and will</p> <p>8 happen, and it's a safety hazard that seamen have to</p> <p>9 be aware of. I think I said that. It is a common</p> <p>10 occurrence and a common --</p> <p>11 Q Let me ask you this: The amount of movement of the</p> <p>12 door is a function of how much the boat is rolling,</p> <p>13 correct?</p> <p>14 A Or pitching or moving. The total sum of all the</p> <p>15 movements will result in the suspended weight moving</p> <p>16 regularly, not staying in a fixed in space.</p> <p>17 Q And the magnitude of that movement is a function of</p> <p>18 the sea state, correct?</p> <p>19 A Basically speaking, yes. If you were on shore in a</p> <p>20 drydock and the vessel was not moving, then that</p> <p>21 load is fixed in space and it's not moving unless</p> <p>22 wind is blowing on it unless there is another force</p> <p>23 acting on that that causes it to move. If you are</p> <p>24 on a stable platform on this table, that suspended</p>	<p style="text-align: right;">Page 108</p> <p>1 rougher it is in general, the more the loads are</p> <p>2 going to move?</p> <p>3 A The rougher it is, the windier it is, the longer the</p> <p>4 length of the pendulum, all of those factors play</p> <p>5 into the amount of movement of the suspended load.</p> <p>6 Q What is your opinion as to how much the door moved</p> <p>7 relative to the, how much will the door move</p> <p>8 relative to the safety chain given the sea</p> <p>9 conditions that were present at the time of</p> <p>10 Mr. Aguiar's accident?</p> <p>11 MR. REGAN: Objection to form.</p> <p>12 A The only testimony to the effect or the estimated</p> <p>13 amount of movement was about four or five inches.</p> <p>14 Q Who said four or five inches?</p> <p>15 A I believe it was Mr. Aguiar himself.</p> <p>16 Q Let me ask you this: When you formed your opinion,</p> <p>17 did you base it upon the assumption that the door</p> <p>18 moved only four to five inches?</p> <p>19 A No. The amount of movement four or five inches, ten</p> <p>20 inches, 12 inches is not an important element. The</p> <p>21 important element is that the chain became taught.</p> <p>22 He observed relative movement of the door, the chain</p> <p>23 became taught, the hook snapped open and hit him in</p> <p>24 the finger. It's simple.</p>

27 (Pages 105 to 108)